MEASUREMENT OF COSMIC RAY NUCLEI IN SUPER JACEE EMULSION

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A system has been developed for semi-automated determination of heavy ion trajectories in emulsions chambers. The tomographic images at various depth of focal plane of the microscope were obtained in emulsion plates. All images were shifted with the distance according to the predicted angle, before they are summed up. The tracks can be sought out by searching spots whose brightness is higher than some threshold. The emulsion plates used in JACEE and Super JACEE are being analyzed. The zenith angle distributions of cosmic ray nuclei are presented to examine the track angle dependence and the efficiency of this method.